

REMARKS

Claims 1-22 remain pending in the application.

No new issues are presented, nor is further search required, as a result of the present Amendment. It is therefore respectfully requested that the Amendment be entered.

Claims 1-15, 17, 20 and 22 over Li in view of Sacca and Chamberlin

In the Office Action, claims 1-15, 17, 20 and 22 were rejected under 35 USC 103(a) as allegedly being obvious over U.S. Pat. No. 5,646,990 to Li ("Li") in view of U.S. Pat. No. 5,692,042 to Sacca ("Sacca"). The Applicants respectfully traverse the rejection.

All claims 1-15, 17, 20 and 22 recite a **full-duplex** system allowing a far end party to a telephone call to both hear playback of a recorded message AND SPEAK AT THE SAME TIME.

The Examiner alleges that Li "discloses a full-duplex speakerphone in figures 1 and 2". (Office Action at 2) The Examiner agrees that "Li fails to teach injecting a message playback signal into the speakerphone, and a recording module for recording a telephone conversation from telephone line 274 (telephone line 274 inherently has a receiving path and a transmitting path)." (Office Action at 2)

Li does NOT teach a speakerphone at all, much less a full-duplex speakerphone as alleged by the Examiner. Rather, Li teaches a loop gain processing system for use in speakerphone applications. (Li, Title) **Li does not teach a speakerphone itself.**

This distinction is important as the teachings of Li are being theoretically combined by the Examiner with multiple other references. In such combination, Li would teach only what it is—a loop gain processing system. Presumably Sacca and/or Chamberlin would 'teach' the speakerphone into which the loop gain processing system is to be applied. Certainly in this combination Li would be applied within the speakerphone taught by the relevant references.

The loop gain processing system taught by Li can't properly be interpreted to somehow 'convert' HALF-duplex speakerphones in both Sacca and Chamberlin into full-duplex speakerphones.

Li teaches a loop gain processing system that has four capable modes of operation: Transmit mode, Receive mode, Silence mode, and Double-Talk mode. (Li, Fig. 3) In Double-Talk mode, Li teaches a method of adjusting transmit and receive gain.

Not only does Li NOT teach a speakerphone itself as alleged by the Examiner, but the Examiner improperly relies on inherent features purportedly drawn from Li in rejecting the claims of the present application.

In particular, the Examiner alleges that Li "inherently has a receiving path and a transmitting path". (Office Action at 2) Firstly, the relevancy of such a statement is in question as Li's telephone line is operated in a receive direction OR in a transmit direction at any one time in a half-duplex system. Secondly, it is well settled in Patent Law that inherency has no place in determinations of obviousness.

Under the doctrine of necessary inherency, **anticipation** may be established when a single prior art reference fails to disclose the claimed invention ipsissimis verbis, but the natural and invariable practice of the reference would necessarily inherently meet all the elements of the claim. See, e.g., Verdegaal Bros., Inc. v. Union Oil Co. of Cal., 814 F.2d 628, 2 USPQ2d 1051 (Fed. Cir. 1987); In re King, 801 F.2d 1324, 231 USPQ 136 (Fed. Cir. 1986); Tyler Refrigeration v. Kysor Indus. Corp., 777 F.2d 687, 227 USPQ 245 (Fed. Cir. 1985); Ethyl Molded Products Co. v. Betts Package Inc., No. 85-111 1032 (D.C.E.D. Kent. 1988). The doctrine of inherency is available only when the inherency can be established as a certainty; probabilities are not sufficient. In re Oelrich, 666 F.2d 578, 581, 212 USPQ 323, 326 (CCPA 1981); In re Chandler, 254 F.2d 396, 117 USPQ 361 (CCPA 1981); Ethyl Molded Prod. Co. at 1032. However, the use of inherency at all is entirely improper with respect to a section 103 rejection. The concept of inherency has no place in determinations of obviousness under section 103, as opposed to anticipation under section 102, because "it confuses anticipation by inherency, i.e., lack of

novelty, with obviousness, which, though anticipation is the epitome of obviousness, are separate and distinct concepts.” Jones v. Hardy, 727 F.2d 1524, 1529, 220 USPQ 1021, 1025 (Fed. Cir. 1984); See also In re Grasselli, 713 F.2d 731, 739, 218 USPQ 769, 775-76 (Fed. Cir. 1983)

So, not only are the claims clearly distinguishable over Li, but the foundation for the section 103 rejection of the claims is improperly based on an allegedly inherent feature of Li. It is respectfully requested that the improper rejection be withdrawn.

The Examiner has previously agreed that Chamberlin fails to disclose a message playback signal that is combined with a receive signal by a summer, allowing simultaneously hearing by a local user of a speakerphone (July 1, 2004 Office Action, page 3). Nevertheless, the Examiner combines Chamberlin and Sacca with Li to arrive at a theoretical full-duplex speakerphone that would allow playback of a recorded message AND allow a conversation to occur between two parties, both listening to the message. Such a theoretical speakerphone, even if properly combined by the Examiner, would still nevertheless be a half-duplex device. (See, e.g., Sacca, col. 13, lines 10-15)

Sacca discloses a combined source signal comprising one or more alternate signal sources, e.g., tape playback, tones, synthesized speech, etc. for transmission over the telephone line.

In fact, not only is Sacca a half-duplex telephone, Sacca teaches AWAY from implementation of a full-duplex telephone. In particular, Sacca teaches that because “the speakerphone operation is bi-stable (only two stable states are possible, TX or RX), the system is essentially simple and can easily be adjusted to achieve desirable performance. Moreover, if one party talks, even pausing between words or sentences, the speakerphone remains in the same state until the other party interrupts.”

Can it be imagined how completely frustrating such a theoretical device would be in a half-duplex speakerphone. For instance, though it might appear that both parties to a speakerphone conversation would be able to listen to a recorded message, as soon as the far end person speaks, coughs, or otherwise makes a noise, the speakerphone at the other end would immediately

switch to a receive (RX) mode. This would CUT-OFF transmission of the recorded message from the speakerphone, and thus at that point the far end party would not be able to hear the recorded message being played at the speakerphone.

An advantage of being able to playback a voice message while speaking at a far end phone is, e.g., to allow a person listening to a voice message to comment on the voice message while a conversation is taking place. The cited prior art fails to disclose, teach or suggest such an advantage.

The application of Li's loop gain processing system in either Sacca's speakerphone or in Chamberlin's speakerphone would nevertheless result in a half-duplex speakerphone not capable of allowing a far end party to a telephone call to both hear playback of a recorded message AND SPEAK AT THE SAME TIME, as claimed by claims 1-15, 17, 20 and 22.

For at least these reasons, claims 1-15, 17, 20 and 22 are patentable over the prior art of record. It is therefore respectfully requested that the rejection be withdrawn.

Claims 16, 18, 19 and 21 over Li and Sacca

Claims 16, 18, 19 and 21 were rejected under 35 USC 103(a) as allegedly being obvious over Li in view of Sacca. The Applicants respectfully traverse the rejection.

Claims 16, 18, 19 and 21 recite a full-duplex system allowing a far end party to a telephone call to both hear playback of a recorded message AND SPEAK AT THE SAME TIME.

The Examiner alleges that Li "discloses a full-duplex speakerphone in figures 1 and 2", but fails to "teach injecting a message playback signal into the speakerphone so that a far end user can listen to the playback signal and to talk at the same time." (Office Action at 7)

As discussed herein above, Li does NOT teach a speakerphone at all, much less a full-duplex speakerphone as alleged by the Examiner. Rather, Li teaches a loop gain processing system for use in speakerphone applications. (Li, Title) Li does not teach a speakerphone itself.

This distinction is important as the teachings of Li are being theoretically combined by the Examiner with Sacca. But, in such a combination, Li would teach only what it is—a loop gain processing system. Presumably Sacca would ‘teach’ the speakerphone into which the loop gain processing system is to be applied. Certainly in this combination Li would be applied within the speakerphone taught by the relevant references.

The loop gain processing system taught by Li can’t properly be interpreted to somehow ‘convert’ HALF-duplex speakerphones in Sacca into a full-duplex speakerphone.

Li teaches a loop gain processing system that has four capable modes of operation: Transmit mode, Receive mode, Silence mode, and Double-Talk mode. (Li, Fig. 3) In Double-Talk mode, Li teaches a method of adjusting transmit and receive gain.

Not only does Li NOT teach a speakerphone itself as alleged by the Examiner, but the Examiner improperly relies on inherent features purportedly drawn from Li in rejecting the claims of the present application.

With respect to claims 18 and 21, the Examiner alleges that in Li it “is inherent that the playback message injected into the digital speakerphone can be either analog or digital, depending on the point of injection.” (emphasis added) (Office Action at 8) Firstly, the relevancy of such a statement is in question as Li does NOT explicitly disclose or teach any digital data paths. Secondly, as discussed above, it is well settled in Patent Law that inherency has no place in determinations of obviousness.

So, not only are the claims clearly distinguishable over Li, but the foundation for the section 103 rejection of the claims is improperly based on an allegedly inherent feature of Li. It is respectfully requested that the improper rejection be withdrawn.

The Examiner combines Sacca with Li to arrive at a theoretical full-duplex speakerphone that would allow playback of a recorded message AND allow a conversation to occur between two parties, both listening to the message. Such a theoretical speakerphone, even if properly combined by the Examiner,

would still nevertheless be a half-duplex device. (See, e.g., Sacca, col. 13, lines 10-15)

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Can it be imagined how completely frustrating such a theoretical device would be in a half-duplex speakerphone. For instance, though it might appear that both parties to a speakerphone conversation would be able to listen to a recorded message, as soon as the far end person speaks, coughs, or otherwise makes a noise, the speakerphone at the other end would immediately switch to a receive (RX) mode. This would CUT-OFF transmission of the recorded message from the speakerphone, and thus at that point the far end party would not be able to hear the recorded message being played at the speakerphone.

An advantage of being able to playback a voice message while speaking at a far end phone is, e.g., to allow a person listening to a voice message to comment on the voice message while a conversation is taking place. The cited prior art fails to disclose, teach or suggest such an advantage.

The application of Li's loop gain processing system in Sacca's speakerphone would nevertheless result in a half-duplex speakerphone not capable of allowing a far end party to a telephone call to both hear playback of a recorded message AND SPEAK AT THE SAME TIME, as claimed by claims 16, 18, 19 and 21.

For these and other reasons, claims 16, 18, 19 and 21 are patentable over the prior art of record. It is therefore respectfully requested that the rejection be withdrawn.

Conclusion

All objections and rejections having been addressed, it is respectfully submitted that the subject application is in condition for allowance and a Notice to that effect is earnestly solicited.

Respectfully submitted,



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